

THE MEDICAL DIVISION

of the

U. S. Office of Civilian Defense



Washington Office

The Medical Division of the U. S. Office of Civilian Defense is responsible for assisting the States and communities in organizing the resources required for personal protection of the civilian population against the hazards of enemy action. To this end, the Division has established the Emergency Medical Service, the Gas Protection Service, the Sanitary Engineering Service and the Rescue Service.

The Chief Medical Officer is Dr. George Baehr, Medical Director (R), U. S. Public Health Service, who was assigned by the Surgeon General to the U. S. Office of Civilian Defense in June 1941. The headquarters staff consists of commissioned officers and consultants of the U. S. Public Health Service detailed to the Office of Civilian Defense.

Medical Advisory Board

A Medical Advisory Board, of which the Chief Medical Officer is chairman, includes the following members: Drs. Robin C. Buerki, dean, Graduate School of Medicine, University of Pennsylvania, Philadelphia; Oliver B. Kiel, president, Texas State Board of Medical Examiners, Wichita Falls, Texas; Albert McCown, medical director, American Red Cross, Washington, D. C.; Charles G. Mixter, assistant professor of surgery, Harvard Medical School, Boston,

Mass.; Huntington Williams, commissioner of health, Baltimore, Md.; and John T. O'Rourke, dean, University of Louisville School of Dentistry, Louisville, Ky. The Surgeon General of the U. S. Public Health Service and the executive secretary of the Health and Medical Committee of the Office of Community War Services serve as ex officio members of the board.

Regional Offices

The Regional staff of the Medical Division in each of the nine Civilian Defense Regions of the country consists of officers and consultants of the U. S. Public Health Service assigned to duty as Regional Medical Officers, Rescue Officers, Sanitary Engineers, Gas Officers, and Nurse Deputies.

State and Local Organization

A Chief of Emergency Medical Service has been appointed in each State, the District of Columbia, the territories and insular possessions, and in almost every local community in the country. He is responsible, under the auspices of the State or local Defense Council, for the organization of medical personnel and facilities into an Emergency Medical Service in accordance with the recommendations of the Medical Division.

Nearly every State and most local communities now have Nurse Deputies to assist the Chief of Emergency Medical Service in providing nursing services for emergencies. Water Coordinators have been appointed in States and communities to carry out the emergency water-supply program. In coastal areas, State Hospital Officers have been appointed. State Gas Consultants have been appointed who are responsible for the organization of gas protection facilities and personnel in the important cities of the State.

Public Health Service officers serve in some of the exposed coastal States as field assistants to the Regional Medical Officer in assisting the States to organize the Emergency Medical Service.

Emergency Medical Service

The local Emergency Medical Service consists of a field casualty service, casualty receiving hospitals, ambulance transport, and emergency base hospitals which are to receive patients transferred from casualty receiving hospitals.

The organization of the Emergency Medical Service is guided by three sections within the Medical Division: The Field Casualty Section, the Hospital Section, and the Nursing Section.

Field Casualty Section

The Field Casualty Section is concerned with establishment of the field casualty service, which consists of Mobile Medical Teams, stretcher teams, casualty stations, ambulances, and other transport. It has worked out plans for a Casualty Information Service and an Emergency Mortuary Service. This section is also responsible for plasma and other supplies and equipment distributed by OCD.

Field Casualty Service.—Mobile Medical Teams are organized to mobilize at hospitals or, for strategic purposes, at other locations in a city. Each mobile team consists of one physician, one nurse, and two or more auxiliaries; the teams are derived either from the personnel of a hospital or from the physicians and nurses in the neighborhood. Two or more Mobile Medical Teams make up an Emergency Medical Field Unit, the component teams alternating on call or relieving each other on duty.

Casualty stations for the care of the lightly injured who do not require hospitalization have been established in the larger cities in a ratio of 1 for each 25,000 persons; in smaller cities or communities in a ratio of 1 to 10,000. Most casualty stations are located at or near hospitals; others are situated a mile or more from a hospital, in sections that are geographically isolated, or in support of medical facilities of important industrial plants.

Immediately upon receiving an air raid warden's report of a bombing incident with casualties, the Medical Adjutant at the Control Center will dispatch to each major incident an Express Party consisting of one Mobile Medical Team, one ambulance, and one sitting-case car. If trapped casualties are reported, a rescue squad will also be dispatched by the Chief of Rescue Service or his deputy as part of the Express Party. Stretcher teams, additional medical personnel and transport are dispatched by the Control Center at the request of the incident physician (head of the mobile team) or the Incident Officer on the scene.

Physicians and auxiliary personnel of the Emergency Medical Service will man gas cleansing stations to care for injured who have also been contaminated with gas. The Medical Division has recommended that facilities for the cleansing of contaminated casualties be established at or near hospitals and casualty stations in exposed communities in the ratio of 1 per 50,000 population.

Ambulance Transport.—Ambulance transport includes three types of vehicles; four-stretcher ambulances in the ratio of 1 to every 10,000 or more inhabitants, passenger cars or station wagons for sitting cases, and large vehicles, such as buses, which can be converted into ambulances for possible evacuation of hospitals. In the absence of an adequate number of four-stretcher ambulances, ambulances and improvised vehicles with smaller capacity are used. All ambulances and improvised vehicles used as such, with their drivers, including those of the Red Cross and other agencies are assigned regularly to the Emergency Medical Service and are under its direction during a raid.

Equipment.—To supplement local resources, equipment for Mobile Medical Teams and for casualty stations has been procured by the

U. S. Office of Civilian Defense and distributed to communities in accordance with priorities determined by the Director on the basis of their degree of exposure to enemy attack and relation to important industrial and military concentrations. About \$5,000,000 was made available by Congress early in 1942 for this purpose.

Blood Plasma.—With money made available through the U. S. Public Health Service from the President's Emergency Fund and by Congress, 155 hospitals in target areas of the country are receiving financial and technical assistance from the Medical Division in the establishment of blood and plasma banks. These hospitals have agreed to accumulate and maintain a reserve of at least one unit of liquid or frozen plasma per bed, which is at the disposal of the Emergency Medical Service for the treatment of civilian war casualties. The plasma may also be used for non-war-connected catastrophes, but the reserve stock must then be promptly replenished. The reserves of plasma prepared under this program will total more than 70,000 units.

In addition, 50,000 units of dried plasma and 30,000 units of frozen plasma have been prepared for OCD from blood collected by the American Red Cross and distributed throughout the country. Depots of dried and frozen plasma are maintained in strategic locations for prompt shipment to any stricken locality which may be in danger of exhausting its local supply. A major portion of this reserve, totaling 150,000 units, is concentrated in the 300-mile coastal target areas, and in Alaska, Puerto Rico, and the Virgin Islands.

Industrial Emergency Medical Service.—To assure adequate emergency medical service for workers in industrial plants in the event of a catastrophe, the Medical Division is cooperating with the U. S. Army and Navy in promoting integration of plant medical services with the Emergency Medical Service of adjacent communities.

Casualty Information Service.—A Casualty Information Service is being established so that information concerning casualties admitted to hospitals and to morgues after air raids and large disasters may be assembled and made available promptly. The Casualty Information Service is an integral element of the general Information Center of the Emergency Welfare

Service, but is under the technical supervision of the local Chief of Emergency Medical Service. The plan provides for the establishment of a system of reporting and recording, the handling of inquiries, the preparation of casualty lists, and the disposition of casualty records.

Mortuary Service.—An Emergency Mortuary Service has been established as part of the Emergency Medical Service in cities exposed to possible enemy attack or other major disaster. The plans provide for the necessary operating units and outline uniform procedures for marking, segregating, and transporting the dead, morgue reception, safeguarding of personal property, methods to expedite identification, release and disposal of bodies, special treatment of gas-contaminated bodies, and for the completion, use, and storage of records.

Hospital Section

The Hospital Section of the Medical Division is responsible for preparations for the hospitalization of civilian war casualties and of patients in civilian hospitals which must be evacuated because of military necessity. The U. S. Public Health Service will reimburse casualty receiving and emergency base hospitals at the rate of \$4.25 per patient day for the care of civilian war casualties or other patients admitted on orders of the State Chief of Emergency Medical Service.

Casualty Receiving Hospitals.—The local Chief of Emergency Medical Service has made arrangements with general hospitals for the reception and care of casualties that may result from enemy action. He is responsible for the distribution of casualties to hospitals. Most of these hospitals have prepared for the evacuation of convalescent patients and for extra bed facilities for the care of emergency patients.

Emergency Base Hospitals.—In all the coastal States, plans either have been completed or are under way for the establishment, when needed, of emergency base hospitals to which civilian casualties and other hospitalized persons can be transferred from the casualty receiving hospitals of exposed coastal cities. The base hospital locations are in safer, sometimes rural, sites, along lines of evacuation determined in collaboration with the military and the State evacuation authorities.

In addition to the \$4.25 a day for the care

of patients transferred upon order of the State Chief of Emergency Medical Service, the professional staffs of emergency base hospitals will be supplemented when necessary by the assignment of reserve officers or consultants of the Public Health Service. A limited number of supervisory nurses will also be provided by the Public Health Service. Arrangements for other nursing staff are the responsibility of the State Chiefs of Emergency Medical Service and their State Hospital Officers and Nurse Deputies and are financed by the hospital concerned. Auxiliary hospital personnel are to be recruited locally through the cooperation of the Red Cross, health departments, and other agencies. The administration of institutions designated as emergency base hospitals will continue to be a responsibility of their present administrative authorities, supplemented in some instances by the staff of the casualty receiving hospital which has been evacuated.

The U. S. Office of Civilian Defense has purchased and stored in convenient locations hospital beds and mattresses which will be loaned to emergency base hospitals when activated.

Affiliated Hospital Units.—Selected hospitals and medical schools have been invited by the Surgeon General of the U. S. Public Health Service to organize affiliated units, each composed of a balanced staff of 15 internists, surgeons, and specialists who are to serve when needed to supplement the staffs of emergency base hospitals. Physicians in the affiliated units are commissioned in the inactive reserve of the Public Health Service. They will be called to active duty by the Surgeon General of the Public Health Service on recommendation of the State Chief of Emergency Medical Service through the Regional and Chief Medical Officers if enemy action should necessitate activation of nearby emergency base hospitals. When called to active duty, they will receive pay and allowances equivalent to those of officers of the corresponding grades in the armed forces. Appointments in the affiliated units are limited to male physicians over 45 years of age or who have physical disabilities or for other reasons have been declared unavailable for military service and to women physicians. Physicians of the affiliated units may resign their commissions to enter the armed forces or, in any event, 6 months after the cessation of hostilities.

In a sudden military emergency the affiliated units will also be available to assist the Army temporarily in caring for military personnel in the vicinity, until Army medical personnel can be reassigned to provide continuing care.

Nursing Service

The Nursing Section is responsible for nursing participation in the Emergency Medical Service. Information on nursing responsibilities in the field casualty service, in casualty receiving hospitals, in homes, and in emergency base hospitals is prepared for distribution to nurses and to official and nonofficial nursing organizations. Plans provide for listing and classification of nurses and mobilization for immediate duty in an emergency.

The Nursing Section is responsible for promotion of the Volunteer Nurses' Aide Program, which is sponsored jointly by the American Red Cross and the U. S. Office of Civilian Defense. It also cooperates with the U. S. Public Health Service in encouraging the expansion and acceleration of nursing education and with the American Red Cross in carrying out the Home Nursing Program and the Red Cross Enrollment Service for reserves of graduate nurses. The Subcommittee on Nursing of the Health and Medical Committee, Office of Community War Services, serves also as the Nursing Advisory Committee of the Medical Division.

Activities are promoted in the field by Regional, State, and local Nurse Deputies.

Rescue Service

The Rescue Section has been established in the Medical Division to organize local Emergency Rescue Services, which will work in close coordination with the Emergency Medical Service. This service has been organized separately from the Fire Service, to take care of the casualties in demolished structures where there is no fire.

Regional and State schools are being established to offer instruction in Rescue Service techniques, especially reconnaissance, tunneling, shoring, and emergency field care of the injured. Members of rescue squads will receive intensive training in the new technique of rescue service and in the special type of first aid required for air raid victims. Stretcher teams of the Emergency Medical Service are

to serve at hospitals, casualty stations, and incidents where the services of Rescue Squads are not needed.

The organization of the Rescue Service at the State and local levels will be independent of but will parallel that of the Emergency Medical Service.

Gas Protection Service

The Medical Division is responsible through its Gas Protection Section for administrative and technical organization and training for civilian defense against chemical warfare. It works closely with the Chemical Warfare Service, U. S. Army, and the Committee on Treatment of Gas Casualties, National Research Council.

Courses in the medical aspects of chemical warfare are given to selected members of medical school faculties, who then provide instruction for practicing physicians in their own States and communities. The Gas Protection Section has prepared designs for gas cleansing stations which exposed communities are advised to establish for the care of contaminated casualties.

Gas specialist courses are given in the War Department Civilian Protection Schools located in six universities to qualified chemists appointed as State Gas Consultants, Senior (local) Gas Officers, and Gas Reconnaissance Agents. These officers are then responsible for setting up the organization for gas protection in their respective States and localities and for training the local protection organization in gas defense. State Gas Consultants have been appointed in nearly all States and Senior Gas Officers in the larger exposed cities.

To supplement the courses in the War Department Civilian Protection Schools, State gas schools are being established in universities and technical schools to provide training for Gas Reconnaissance Agents, who serve in localities under the Senior Gas Officer.

The Medical Division has outlined the duties of the State and local gas officers and of each of the protection services of the U. S. Citizens Defense Corps before, during, and after gas attacks.

Sanitary and Public Health Engineering Service

Through Regional Sanitary Engineers commissioned in the U. S. Public Health Service, States and local communities in all target areas of the country are being assisted in reviewing their needs for the protection of the water supply and for additional sources of water if the local supply should be interrupted by enemy action. The engineers also assist the States and localities in planning to meet the special sanitary needs which may be precipitated by the interruption of the transport of food, interference with sewage disposal, and bacterial or chemical contamination of food, water, or milk.

As a result of the activities of the Sanitary Engineering Section of the Medical Division, most States have appointed State Water Coordinators who are working in collaboration with Sanitary Engineers on State or local problems of water supply. Most States have adopted mutual aid plans by which personnel, supplies, and equipment may be made available promptly to a stricken community from other areas.

In Civilian Defense Regions in which Regional Gas Officers have not been appointed, Regional Sanitary Engineers are serving also in that capacity.

Scientific Research and Development

The Medical Division has established a Scientific Research and Development Section, which assembles current medical and technical information for use in formulating and revising recommendations to States and local communities. Close relationships are maintained with the Division of Medical Sciences of the National Research Council, the Committee on Medical Research of the Office of Scientific Research and Development, research units of the Army and Navy, and with other Federal agencies.

A medical intelligence officer is also assigned to duty in Great Britain to secure medical and technical information based upon the current wartime experiences of agencies under the direction of the British Ministry of Home Security and the Ministry of Health.



The Medical Division has issued the following publications:

Medical Division Bulletin No. 1: Emergency Medical Service for Civilian Defense.

Medical Division Bulletin No. 2: Equipment and Operation of Emergency Medical Field Units.

Medical Division Bulletin No. 3: Protection of Hospitals.

Medical Division Bulletin No. 4: Central Control and Administration of Emergency Medical Service.

Medical Division Bulletin No. 5: Emergency Mortuary Service.

Medical Division Bulletin No. 6: Nursing Participation in Emergency Medical Service.

Medical Division Bulletin No. 7: Emergency Medical Service in Industrial Plants.

Sanitary Engineering Bulletin No. 1: Protection and Maintenance of Public Water Supplies Under War Conditions.

Sanitary Engineering Bulletin No. 2: Municipal Sanitation Under War Conditions.

Handbook of First Aid.

Protection Against Gas. (In collaboration with Protection Division, OCD.)

First Aid in the Prevention and Treatment of Chemical Casualties.

Field Care and Transportation of the Injured.

Technical Manual for the Rescue Service.

Prepared in collaboration with the American Red Cross:

Syllabus of Course of Instruction for Nurses' Aides.

Guide for Training of Volunteer Nurses' Aides.

Instructor's Outline for First Aid Course for Civilian Defense.

Advanced First Aid for Civilian Defense.

Prepared in cooperation with the National Research Council:

Treatment of Burns and Prevention of Wound Infections.

A Technical Manual on the Preservation and Transfusion of Whole Human Blood.

A Technical Manual on Citrated Human Blood Plasma.

Clinical Recognition and Treatment of Shock, Blast Syndrome, and Crush Syndrome.

Prepared in cooperation with the Office of Community War Services:

Volunteers in Health, Medical Care, and Nursing.

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PLANT PROTECTION
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NURSE'S AIDES
NURSING AUXILIARIES

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WATER SUPPLY
SEWAGE SYSTEMS
REFUSE DISPOSAL
PROTECTION OF FOOD
AND MILK

GAS PROTECTION
MEDICAL EDUCATION
PUBLIC EDUCATION
GAS IDENTIFICATION
GAS CLEANSING
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